

AMENDMENTS TO THE CLAIMS

This listing of claims below will replace all prior versions, and listings, of claims in the application:

Listing of the Claims:

1. (Currently Amended) A method for Internet telephony, comprising:
connecting a first telephone to a first switch using a first virtual circuit;
connecting a second telephone to a second switch using a second virtual circuit; and
connecting the first switch to the second switch using a third virtual circuit;
wherein said first virtual circuit, said second virtual circuit, and said third virtual circuit are managed independently as part of separate networks.
2. (Original) The method of claim 1, further comprising:
receiving a data packet at the first switch from the first telephone through the first virtual circuit;
routing the data packet, based on a destination for the data packet, from the first switch to the second switch via said third switched virtual circuit; and
sending the data packet from the second switch through the second virtual circuit to the second telephone.
3. (Original) The method of claim 2, wherein the data packet comprises voice data.
4. (Original) The method of claim 1, wherein said received data packet includes a header, the method further comprising stripping the header from the data packet prior to routing and then routing the stripped data packet to the second switch.

5. (Original) The method of claim 4, further comprising adding a header to the stripped data packet subsequent to receiving the data packet at the second switch prior to sending the packet to the second telephone.

6. (Currently Amended) The method of claim 2, further comprising converting telephone call data between an Internet Protocol (IP) IP network and an AAL2 Asynchronous Transfer Mode ATM Adaptation Layer Type 2 (AAL2) network prior to routing the data packet.

7. (Currently Amended) The method of claim 2, further comprising converting the data packet between an AAL5 ATM Adaptation Layer Type 5 (AAL5) network and an AAL2 network prior to routing the data packet.

8. (Currently Amended) A method for connecting a plurality of edge networks that straddle at least one core network, the method comprising:

setting up at least one trunk according to a first protocol across the core network, irrespective of communications among the plurality of edge networks and the at least one core network;

receiving data from at least a first edge network via a first multiprotocol convergence switch (MPCS) associated with the first edge network; and

transmitting the data from the first multiprotocol convergence switch to at least a second multiprotocol convergence switch, associated with the second edge network, via the trunk.

9. (Currently Amended) The method of claim 8, wherein the plurality of edge networks are selected from the group consisting of Transmission Control Protocol/User Datagram Protocol/Internet Protocol (TCP/UDP/IP) TCP/UDP/IP, AAL2 ATM, and AAL5 ATM networks.

10. (Original) The method of claim 8, wherein the data includes a header portion and further comprising:

stripping the header portion from the data prior to routing a data packet to the second MPCS; and

adding a replacement header to the data subsequent to receiving the data packet at the second MPCS.

11. (Currently Amended) An Internet telephone switch, comprising:

means for switching data from a first channel on a first switched virtual circuit/switched virtual path to a second channel on a second switched virtual circuit/switched virtual path; and

means for stripping headers from IP traffic using out-of-band signaling.

12. (Original) The Internet telephone switch of claim 11, further comprising means for converting data among a TCP/UDP/IP network, an AAL2 ATM network, and an AAL5 ATM network.

13. (Currently Amended) A method for transmitting a packet through an electronic network, the method comprising:

setting up on a core network a plurality of switched virtual paths each having an associated edge ATM switch, irrespective of communications between the associated edge ATM switch and the core network, each switched virtual path comprising at least one switched virtual circuit, each switched virtual circuit comprising at least one channel;

assigning a respective virtual path identification number to each switched virtual path;

assigning a respective virtual circuit identification number to each switched virtual circuit;

identifying a packet with a switched virtual path identification number and with a switched virtual circuit identification number; and

transmitting the packet to the associated edge ATM switch using the switched virtual path having the same virtual path identification number as the packet and the switched virtual circuit having the same virtual circuit identification number as the packet.

14. (Original) The method of claim 13, further comprising:
 setting up on the edge network at least one internal switched virtual path; and
 routing the packet through the edge network using the internal switched virtual path.
15. (Currently Amended) An multiprotocol convergence switch comprising:
 at least one protocol stack;
 at least one data transfer layer; and
 at least one multiprotocol convergence switch controller for enabling a first telephone to connect to at least one other telephone using a single virtual circuit and for managing communications with an external call agent.
16. (Original) The multiprotocol convergence switch of claim 15, wherein the protocol stack comprises:
 a UDP/IP stack; and
 an ATM stack.
17. (Original) The multiprotocol convergence switch of claim 16 wherein the ATM stack comprises at least one layer selected from the group consisting of an AAL2 layer and an AAL5 layer.
18. (Original) The multiprotocol convergence switch of claim 17 wherein data received from an AAL5 stack user is passed to the AAL5 data transfer layer and data received from an AAL2 stack user is passed to the AAL2 data transfer layer.
19. (Original) The multiprotocol convergence switch of claim 15 wherein the data transfer layer includes at least one data transfer element.

20. (Original) The multiprotocol convergence switch of claim 15 wherein the switch controller comprises:

- a call agent communication element;
- a UDP signaling element;
- an ATM signaling element; and
- a routing table.

21. (Currently Amended) A packet switched Internet telephone network comprising:

- a first multiprotocol convergence switch;
- at least a second multiprotocol convergence switch;
- at least one external call agent associated with each multiprotocol convergence switch for controlling the respective multiprotocol convergence switch; and
- at least a first ATM virtual circuit connecting the first and second multiprotocol convergence switches.

22. (Cancelled)

23. (Original) A method of header stripping comprising:

- receiving, on a first input UDP port, a packet comprising a header and data;
- using a first multiprotocol convergence switch to find, in a first routing table, a first output UDP port associated with the first input UDP port;
- using the first multiprotocol convergence switch to strip the header from the packet;
- storing the header within a call setup message;
- sending the call setup message to a second multiprotocol convergence switch;
- saving a header in a second routing table associated with said second multiprotocol convergence switch, using the information in said call setup message;
- using the first multiprotocol convergence switch to write the data to the first output UDP port;
- receiving the data at the second multiprotocol convergence switch on a second input UDP port associated with the first output UDP port;
- using the second multiprotocol convergence switch to retrieve the header from the second routing table;

using the second multiprotocol convergence switch to find, in the second routing table, a second output UDP port;

adding the header from the second routing table to the data to reconstitute the packet; and

writing the packet to the second output UDP port.

24. (Original) The method of claim 23 further comprising:

using the second multiprotocol convergence switch to increment a packet ID and to recalculate a checksum associated with the header to generate a new header; and

placing the new header in the second routing table.

25. (Original) A method for header stripping in a switched packet network, comprising:

establishing a first connection for transmitting a data flow comprising at least one data packet, the data packet including data, a header, and an ID;

terminating the data flow into the packet-switched network at an ingress point;

determining a destination of the data packet;

determining a route through the network from the ingress point to the data packet destination;

establishing a second connection comprising an AAL2 trunk from the ingress point to an egress point;

establishing a third connection from the egress point to a data packet destination;

stripping the header from the data packet;

passing the header to the egress point;

placing the header in a routing table such that it is associated with the selected route;

sending the data packet to the egress point;

retrieving the header from the routing table in accordance with the route by which the egress point receives the data packet;

reattaching the header to the data packet; and

transmitting the data packet to the destination.